

A19745

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PRKAR2B Rabbit mAb

Catalog No.: A19745

Recombinant

Basic Information

Observed MW

46kDa

Calculated MW

46kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

WB,IHC-P,ELISA

Cross-Reactivity

Mouse,Rat

CloneNo number

ARC2272

Background

cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. The protein encoded by this gene is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. This subunit has been shown to interact with and suppress the transcriptional activity of the cAMP responsive element binding protein 1 (CREB1) in activated T cells. Knockout studies in mice suggest that this subunit may play an important role in regulating energy balance and adiposity. The studies also suggest that this subunit may mediate the gene induction and cataleptic behavior induced by haloperidol.

Recommended Dilutions

WB 1:500 - 1:1000

IHC-P 1:50 - 1:200

Immunogen Information

Gene ID

5577

Swiss Prot

P31323

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 319-418 of human PRKAR2B (P31323).

Synonyms

PRKAR2; RII-BETA; PRKAR2B

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

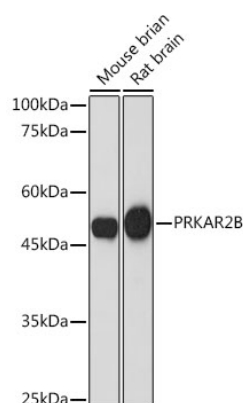
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

Validation Data



Western blot analysis of various lysates using PRKAR2B Rabbit mAb (A19745) at 1:1000 dilution.

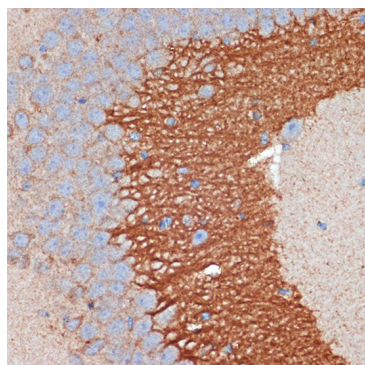
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

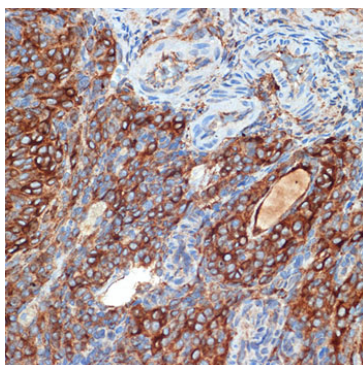
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 180s.



Immunohistochemistry analysis of paraffin-embedded mouse brain using PRKAR2B Rabbit mAb (A19745) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded rat ovary using PRKAR2B Rabbit mAb (A19745) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.